Refine Search

Search Results -

Terms	Documents
L15 and node	15

1134
5.3.4

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L16

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Monday, May 03, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L16	L15 and node	15	L16
L15	L14 not L6	31	L15
L14	L13 and (comput$3 near distance)	41	L14
L13	L12 and (nearest near neighbor)	235	L13
L12	707/$.ccls.	20179	L12
DB=USPT; PLUR=YES; OP=OR			
L11	6263334.pn.	1	L11
L10	6263334.pn.	1	L10
L9	6263334.pn.	1	L9
L8	6236985.pn.	1	L8
L7	6236985.pn.	1	L7
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L6	L5 and (tree same neighbor same node)	18	L6
L5	L4 and tree	68	L5

h e b b cg b e e ch

L4	L3 and (comput$3 near distance)	101	L4
L3	L2 and node$1	1798	L3
L2	"nearest neighbor"	6778	L2
L1	"nearest neighbor set nodes"	2	L1

END OF SEARCH HISTORY

h e b b cg b e e ch

```
File 275:Gale Group Computer DB(TM) 1983-2003/Aug 19
         (c) 2003 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Aug 19
         (c) 2003 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2003/Aug 19
         (c) 2003 The Gale Group
File  16:Gale Group PROMT(R) 1990-2003/Aug 19
         (c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2003/Aug 19
         (c)2003 The Gale Group
File 624:McGraw-Hill Publications 1985-2003/Aug 20
         (c) 2003 McGraw-Hill Co. Inc
File  15:ABI/Inform(R) 1971-2003/Aug 19
         (c) 2003 ProQuest Info&Learning
File 647:CMP  Computer Fulltext 1988-2003/Jul W4
         (c) 2003 CMP Media, LLC
File 674:Computer News Fulltext 1989-2003/Aug W3
         (c) 2003 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2003/Aug 19
         (c) 2003 The Dialog Corp.
File 369:New Scientist 1994-2003/Aug W2
         (c) 2003 Reed Business Information Ltd.

Set     Items   Description
S1     422630   TREE? ? OR HIERARCH?
S2       5613   DECISION()TREE? ?
S3      14951   (NODE? ? OR LEAVE? ? OR LEAF??)(5N)(SPLIT???? OR PARTITION-
             ??? OR DIVID??? OR DIVISION OR SEGMENT? OR FRAGMENT? OR PARS?-
             ?? OR BREAK??? OR BROKEN OR SEPARAT? OR CHOP????)
S4     695372   DISTANCE? ?
S5       1392   EUCLIDEAN? ?
S6          0   S2(S)S3(S)S4
S7        234   S3(S)S4
S8          2   S2 AND S7
S9          1   S1(S)S3(S)S4(S)S5
S10         1   S3(S)S4(S)S5
S11        15   S1(S)S3(S)S4
S12        16   S8:S11
S13        14   RD (unique items)
```

13/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01992100 SUPPLIER NUMBER: 18691262 (USE FORMAT 7 OR 9 FOR FULL TEXT)
A network-design algorithm. (Software Explorations) (Technology Tutorial) (Tutorial)
Bentley, Jon
UNIX Review, v14, n11, p89(5)
Oct, 1996
DOCUMENT TYPE: Tutorial ISSN: 0742-3136 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 2139 LINE COUNT: 00182

ABSTRACT: A network-design algorithm is demonstrated, starting with the concept of the minimum spanning **tree** (MST). The MST shows a number of dots that represent computers or other devices, each connected by lines, or edges. The MST establishes the shortest...

...a circuit board the MST can show the best way to wire a set of pins that must be connected. Prim's algorithm creates this **tree** by taking any node as a starting point and always adding the nearest unconnected node. This algorithm is implemented in the C programming language. One...

...is that its speed is exponentially slowed down as more nodes are added. Dijkstra designed an enhancement to the algorithm that reduces the number of **distance** calculations required, by taking each **node** outside the **fragment** and tracking its nearest neighbor inside the fragment.

13/3,K/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01521911 SUPPLIER NUMBER: 12353483 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Bit-tree: a data structure for fast file processing. (Technical)
Ferguson, David E.
Communications of the ACM, v35, n6, p114(7)
June, 1992
DOCUMENT TYPE: Technical ISSN: 0001-0782 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 5104 LINE COUNT: 00367

... given in [1] in that it will describe a B-Tree that more closely represents B-Tree implementations used in contemporary data processing.

A B- **Tree** consists of a number of nodes. Each **node** contains a number of pointers **separated** by keys. Hence, there is one more pointer in a node than there are keys. The keys are in ascending order. Every node is either...

...to other nodes. The pointers in a leaf node are relative record numbers (RRN) that specify the corresponding ordinal record numbers. One node in the **tree** is the root node. Starting at the root, the number of nodes traversed before encountering a leaf node is called the height of the **tree** . All leaf nodes are at the same **distance** from the root. The number of entries in a node, called the order of the **tree** , is determined by the node size. If key compression is employed, however, the order of different nodes in a **tree** may vary.

Searching a B-Tree for a record with a particular key is straightforward. Starting with the root node, search each node encountered from...

13/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01450049 SUPPLIER NUMBER: 11124517 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Banyan's VINES: built-in routing makes it an aptly named network. (Virtual Networking System network operating system)(Banyan Systems Inc.) (Software Review) (evaluation)
Christian, Kaare
PC Magazine, v10, n15, p128(1)
Sept 10, 1991
DOCUMENT TYPE: evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 8122 LINE COUNT: 00617

... es discriminate between the packets or frames they pass, and they move only thos e packets and frames across the link that are addressed to **nodes** on the other LA N **segment** . Like repeaters, bridges can move packets or frames between different kinds of me dia. Similarly, this action is invisible to anyone using the network. The...two LAN segments. The proc ess becomes more complex when multiple LAN segments are linked together, either directly in local connections or remotely through long- **distance** circuits. If mul tiple LAN segments are connected through bridges, either across a backbone or in a serial cascade, then extraneous traffic must pass though...
...several established techniques to handle data storms. The most common t echnique, adopted by the IEEE 802.1 NetWork Management Committee, is called the Spanning **Tree** Algorithm. Software conforming to this algorithm can sense the exi stence of multiple paths and shut one down. Since the technique is not economica l for use over long- **distance** circuits connecting remote bridges, products suppor ting this algorithm are primarily local bridges. You should be familiar with the phrase, however, since it's commonly...

13/3,K/4 (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01371848 SUPPLIER NUMBER: 08817238 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The state of the optical art. (optical fiber in telecommunications) (includes related article about the FDDI standard)
Simpson, Alan K.
Telephony, v219, n10, p40(4)
August 27, 1990
ISSN: 0040-2656 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2561 LINE COUNT: 00209

... scoop Specific characteristics of the FDDI standard include: * Specification of 100-Mb/s timed token passing ring; * Use of a computer rotating dual ring of **trees** topology that can survive a cable **break** or **node** failure, increased dependability; * Use of token append protocol, which allows for efficient use of the 100-Mb/s bandwidth; * Support for up to 1000 physical...

...receiver pair counts as a physical connection; * Support for a total fiber length of 200 kilometers (or 100 kilometers X 2 rings) and an interstation **distance** of up to 2 kilometers, for extending the geographical span of the local area network; * Specification of 62.5/125 micron multimode fiber and 1300...

13/3,K/5 (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01094945 SUPPLIER NUMBER: 00540332
A Tree-Matching Algorithm Based on Node Splitting and Merging.
Lu, S.Y.
IEEE Transactions on Pattern Analysis and Machine Intelligence, v6, n2, p249-256
March, 1984
ISSN: 0162-8828 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: A tree-matchi[redacted] algorithm which matches trees [redacted]ng the number of **node splitting** and merging operations is described. The **distance** measures proposed measure structural deformation better than measures that use the number of insertions, deletions, and substitutions of **tree** nodes. The algorithm's time complexity is O (N(M squared)) where N and M represent the number of nodes of the **trees** .

13/3,K/6 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06465547 Supplier Number: 55764936 (USE FORMAT 7 FOR FULLTEXT)
the shops at sunset place.
Emerson, Dan
Shopping Center World, v28, n4, pE12
April, 1999
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1739

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
there's a storm building in south Florida. The early evening calm is **broken** as the large, fan-like **leaves** of gnarly banyan **trees** begin to undulate, almost imperceptibly at first, in a gentle, cooling breeze. There's a low rumble of thunder in the **distance** , gradually becoming louder as the breeze and leaves move faster. Then lightning flashes across the sky and the birds roosting in the **trees** scatter.

13/3,K/7 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

05178048 SUPPLIER NUMBER: 10823947 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Detection with high resolution radar: great promise, big challenge.
Farina, Alfonso; Studer, Flavio A.
Microwave Journal, v34, n5, p263(7)
May, 1991
ISSN: 0192-6225 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 4124 LINE COUNT: 00337

... the same form by defining appropriate boundary conditions (surface impedance). [18]

Rigid bodies are characterized by a time-invariant scattering function h(r), while the **distance** R to a reference point is allowed to vary with time according to target motion. Nonrigid bodies instead require a time-varying scattering function h(r;t) to be defined; this might be the case of sea-surface or **leaves** of a **tree** or **fragments** of a reentry body.

Target response to more complex incident waveforms can be derived by resorting to the superposition of monochromatic waves, and, hence to...

13/3,K/8 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

02375370 126517571
Performance evaluation of parallel S-trees
Tousidou, Eleni; Vassilakopoulos, Michael; Manolopoulos, Yannis
Journal of Database Management v11n3 PP: 28-34 Jul-Sep 2000
ISSN: 1063-8016 JRNL CODE: DAN
WORD COUNT: 4679

...TEXT: the same internal node as parent. Due to the way it is decided in

which leaf anew signature will be inserted and the way that **nodes** , either internal or **leaves** , are **split** when they overflow, sibling **leaves** are very likely to contain similar signatures. During a search query, it is very probable that more than one sibling leaf will be needed for...

... to a different disk, as long as there is a disk with no siblings. When all disks contain at least one sibling, we compute a **distance** function between the sibling not yet stored and each disk. In this article, we examine two functions giving the **distance** between a node and a disk:

a. the minimum hamming distance between the signature of this node and the signatures of its siblings already stored...

...DESCRIPTORS: **Decision trees**

13/3,K/9 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

02040738 55632723
The cognitive representation of responses to social conflict: The development of an integrative taxonomy
Rhoades, Jonathan A; Arnold, Josh A
International Journal of Conflict Management v10n4 PP: 360-384 1999
ISSN: 1044-4068 JRNL CODE: IJCM
WORD COUNT: 9388

...TEXT: analysis, we computed solutions in 1 through 5 dimensions and compared the results by the standard goodness of fit statistic: Stress. To create the additive- **tree** representation we used the algorithm implemented by the program ADDTREE (Corter, 1982; see also Sattath & Tversky, 1977). This program begins by creating a complete-link cluster solution then, using an alternating least squares algorithm, fits the four-point condition (i.e., the three largest **distances** of any object quadruple must be equal). This procedure estimates an optimal length for the **segments** between **nodes** in the **hierarchical** classification, and allows the lengths of the terminal segments to vary depending on the relative dissimilarity of a given conflict response with all other responses... studies, this additional concern should lead them to involve others in the conflict either by directly enlisting their support or through gossiping. This sort of **decision tree** approach to choosing conflict responses suggests that characteristics of the conflict setting can be modeled as determinants of disputant's preferences. That is, this approach...

13/3,K/10 (Item 3 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01055180 97-04574
Solving marketing optimization problems using genetic algorithms
Hurley, S; Moutinho, L; Stephens, N M
European Journal of Marketing v29n4 PP: 39-56 1995
ISSN: 0309-0566 JRNL CODE: EJM
WORD COUNT: 6189

...TEXT: order combinations of genes with high fitness.

As already mentioned, Ramaswamy and DeSarbo[64] suggest a new technique for using panel data to determine a **hierarchical tree** representation where terminal nodes are used for both products and market segments. The smaller the "distance" between a product **node** and a market **segment node** , the higher the **segment** 's preference for that product. The raw data for the method are the values of (Equation omitted) which represent the number of choices of product jj for household h. The objective is to determine the **hierarchical tree** and the values of as which are the proportions of households in the sample belonging to segment s. The **tree** is determined

uniquely from constrained values representing " **distance** " between terminal nodes i and j. The likelihood is a function L (a,x,d) given by:
(Equation omitted)

The constraints on the distances so...

13/3,K/11 (Item 4 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00457113 89-28900
Utilizing Cut Trees as Design Skeletons for Facility Layout
Montreuil, Benoit; Ratliff, H. Donald
IIE Transactions v21n2 PP: 136-143 Jun 1989
ISSN: 0740-817X JRNL CODE: AIE

...ABSTRACT: An attractive class of design skeletons is the spine layout concept. When viewed as a graph, a spine structure is a special case of spanning **tree** . One spanning **tree** that is appealing for use as a design skeleton is a cut **tree** . A cut **tree** for a graph is a spanning **tree** where the arc of minimum weight on the unique path **separating** 2 **nodes** corresponds to the minimum cut **separating** the 2 **nodes** in the original graph. If one wants to partition the cells into 2 nonempty sets so that the flow between the 2 sets is minimized, the cut **tree** indicates the optimum partition. The cut **tree** also provides designers with valuable insights regarding the cost of increasing the length of aisles and the aisle structure that will minimize the number of trips times the **distance** traveled. ...

13/3,K/12 (Item 5 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00402153 88-18986
A Faster Approximation Algorithm for the Steiner Problem in Graphs
Mehlhorn, Kurt
Information Processing Letters v27n3 PP: 125-128 Mar 25, 1988
ISSN: 0020-0190 JRNL CODE: IPL

ABSTRACT: Kou, Markowsy, and Berman (1981) described a procedure for finding a Steiner **tree** for a connected, undirected **distance** graph with a specified subset of the set of vertices. A new implementation of that 1981 algorithm is described. Using the new implementation, it is possible to find a Steiner **tree** whose total **distance** of all edges is at most 2 times one minus (one **divided** by the minimum number of **leaves** greater than the total **distance** of all edges of a Steiner minimal **tree**). The solution is both faster and simpler than previous solutions to the problem since it reduces the question being considered to a shortest path and a minimum spanning **tree** calculation. The algorithm: 1. constructs the complete **distance** graph for the connected undirected **distance** graph (G), 2. finds a minimum spanning **tree** for the complete **distance** graph, 3. constructs a subgraph of G, 4. finds a minimum spanning **tree** of the subgraph of G, and 5. constructs a Steiner **tree** from the minimum spanning **tree** so no leaves in the Steiner **tree** are Steiner vertices.
...

13/3,K/13 (Item 6 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00177422 82-18983
Locating Centers on a Tree with Discontinuous Supply and Demand Regions
Tamir, Arie; Zemel, Eitan
Mathematics of Operations Research v7n2 PP: 183-197 May 1982
ISSN: 0364-765X JRNL CODE: MMR

ABSTRACT: A presentati[redacted] is made of an efficient algor[redacted]m for a general version of the p center problem on an undirected **tree** network. To formulate the problem precisely, it is assumed that an undirected **tree** T = T(N,E) is embedded in the **Euclidean** plane, so that edges are line **segments** whose endpoints are the **nodes** and edges intersect one another only at nodes. A consideration is made of more complicated, yet realistic ''supply'' and ''demand'' regions. Each of the sets...

... facility location sites because of the inexistence of appropriate amenities, restrictive zoning laws, the prohibitively high price of property, the desire to maintain a certain **distance** between facilities and major population centers, and other such factors. The algorithm that is presented can handle such problems quite efficiently. Figures. ...

13/3,K/14 (Item 1 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters

00748157
TELECOMS CARRIERS AND THEIR EATING HABITS
Telecoms Deal Report
October 27, 2000 VOL: 2 ISSUE: 20 DOCUMENT TYPE: NEWSLETTER
PUBLISHER: PHILLIPS BUSINESS INFORMATION
LANGUAGE: ENGLISH WORD COUNT: 1123 RECORD TYPE: FULLTEXT

TEXT:
...centred areas would
allow them to cream off corporate accounts that typically would show higher margins than the consumer segments. Also, compared to the long **distance** (L-D)
phone markets, there were few competitors. Both companies concentrated on building metropolitan area networks (MANs) that, in time, would form the basis
for...

...Colt and WorldCom were the first in Europe to blatantly focus on the corporate customers on a large scale. But by early 1999 the market **segment** had
crowded up tremendously. **Leave** aside the so far failed attempts of cable operators as CWC to make a strong impact, revamped Cable and Wireless, KPN and
partner Qwest, Energis...carrier / carrier
activities increases.
While Colt's star rose, WorldCom's rocket set. The inclusion of US number two L-D operator MCI in its **hierarchy** marked its pinnacle. A similar move to
acquire the number three was thwarted by US regulators. Half-hearted attempts to
enter European 3G auctions as...

File 348:EUROPEAN PATENT 978-2003/Aug W02
(c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030814,UT=20030807
(c) 2003 WIPO/Univentio

Set	Items	Description
S1	54811	TREE? ? OR HIERARCH?
S2	1265	DECISION()TREE? ?
S3	14415	(NODE? ? OR LEAVE? ? OR LEAF??)(5N)(SPLIT???? OR PARTITION-??? OR DIVID??? OR DIVISION OR SEGMENT? OR FRAGMENT? OR PARS?-?? OR BREAK??? OR BROKEN OR SEPARAT? OR CHOP????)
S4	411589	DISTANCE? ?
S5	2218	EUCLIDEAN? ?
S6	0	S2(S)S3(S)S4(S)S5
S7	2	S2(S)S3(S)S4
S8	1	S1(S)S3(S)S4(S)S5
S9	55	S1(S)S3(S)S4
S10	17	S9/TI,AB,CM
S11	20	S7:S8 OR S10

11/5,K/6 (Item 3 fr[redacted]file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00957136 **Image available**
REPRESENTATIONS FOR ESTIMATING DISTANCE
REPRESENTATIONS SERVANT A APPRECIER DES DISTANCES
Patent Applicant/Assignee:
WAVEMARKET INC, 1001 Camelia Street, Berkeley, CA 94710, US, US (Residence), US (Nationality)
Inventor(s):
KLEIN Philip N, 1607 Bonita Avenue, Berkeley, CA 94709, US,
IOPPE Igor, 47 Ford Mason, San Francisco, CA 94123, US,
ROUMELIOTIS Tasso, 1433 Spruce Street, Berkeley, CA 94709, US,
Legal Representative:
KANG Peter H (agent), Skjerven Morrill LLP, Three Embarcadero Center, 28th Floor, San Francisco, CA 94111, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200291298 A1 20021114 (WO 0291298)
Application: WO 2002US14839 20020509 (PCT/WO US0214839)
Priority Application: US 2001289586 20010509; US 200239539 20020104
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G06N-005/02
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 15889

English Abstract
In one aspect, a method (920) and system (Fig. 15A) are provided for preprocessing a weighted planar undirected graph (10) and representing the results of the preprocessing so as to facilitate subsequent approximate distance queries. A representation can be constructed so that an approximate distance from one node to another can be computed quickly. Also, the representation in one embodiment stores information for computing distances in a relatively compact format, thus reducing memory requirements. In another aspect, a method and system are provided which use the representation for rapid computation of distances.

French Abstract
Dans une variante, cette invention concerne un procede (920) et un systeme permettant d'effectuer un pretraitement d'un graphe (10) non oriente, planaire et pondere, et de representer les resultats de ce pretraitement afin que les requetes de distances approchees ulterieures soient facilitees. Une representation peut etre elaboree de sorte qu'une distance approchee entre deux noeuds puisse etre calculee rapidement. En outre, dans un mode de realisation, la representation met en memoire des informations servant au calcul de distances dans un format relativement compact, permettant ainsi la reduction de la capacite de memoire requise. Dans une autre variante, cette invention concerne un procede et un systeme faisant appel a la representation pour effectuer des calculs rapides de distances.

Legal Status (Type, Date, Text)
Publication 20021114 A1 With international search report.

Fulltext Availability:
Claims

Claim
... zi-:, and h(zi) comprises a distance from the root node to node zi.
8 . A representation of a network, comprising:
an input graph comprising **nodes** and edges;
one or more **separators** comprising one or more shortest paths, each comprising a plurality of nodes, wherein said nodes in said shortest paths comprise portal nodes; a recursive decomposition **tree** of said input graph, wherein said **tree** comprises a plurality of vertices, each vertex having a depth value and each vertex corresponding to one or more nodes; a first table of data...third entries each indexed according to said shortest paths of said at least one separator; for each said third entry in said third table, corresponding **distance** values; wherein for any node w on a shortest path, there is a node z such that the **distance** from a corresponding vertex v to node z plus the **distance** from node z to node w is at most (I + (I -c/2)Eo) times the **distance** from said vertex v to

11/5,K/7 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00828368 **Image available**
ADDRESS TRANSLATION AND ROUTING FOR INTERNET TELEPHONY
TRADUCTION ET ACHEMINEMENT D'ADRESSES DESTINES A LA TELEPHONIE PAR INTERNET
Patent Applicant/Assignee:
XYBRIDGE TECHNOLOGIES INC, 3400 Wateview Pkwy, Suite 107, Richardson, TX 75080, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
JAWAD Ayaz, 5945 W. Parker Road #1021, Plano, TX 75093, US, US (Residence), IN (Nationality), (Designated only for: US)
ANURAG Vohra, 6900 Preston Rd., Plano, TX 75024, US, US (Residence), IN (Nationality), (Designated only for: US)
Legal Representative:
XYBRIDGE TECHNOLOGIES INC (commercial rep.), James A. HARRISON, P.O. Box 670007, Dallas, TX 75367, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200161947 A1 20010823 (WO 0161947)
Application: WO 2001US4804 20010214 (PCT/WO US0104804)
Priority Application: US 2000183267 20000217; US 2000196447 20000411
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04L-012/66
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 12400

English Abstract
A call agent (1004) for routing calls through a data packet network (1016) communicates with or includes an address translation module (1008) that determines the address routing for a call and that enables the call agent (1004) to setup the call. The address translation module (1008) is formed to receive information about the source of the call and to determine how to route the call. Then, the address translation module (1008) communicates with the call agent (1004) to enable it to complete the call routing. Even if a called party cannot be reached purely by way of the Internet (1016), the address translation module is able to determine a media or signaling gateway to which the call can be routed by

way of the Internet (1[redacted]) and from which a call may be [redacted]nerated over a public switched telephone network.

French Abstract
L'invention concerne un appel position (1004) servant a acheminer des appels dans un reseau de donnees par paquets (1016) communiquant avec, ou comprenant un module (1008) de traduction d'adresses determinant l'acheminement de l'adresse pour un appel et permettant a l'appel position (1004) d'etablir l'appel. Le module (1008) de traduction d'adresse est concu pour recevoir des informations sur une source de l'appel et determiner comment acheminer l'appel. Ensuite, le module (1008) de traduction d'adresse communique avec l'appel position (1004) afin de lui permettre d'achever l'acheminement de l'appel. Meme lorsqu'une partie appelee ne peut etre jointe uniquement via Internet (1016), le module de traduction d'adresse peut determiner un support ou une passerelle de signalisation vers lesquels peut etre achemine un appel via Internet (1016) et d'ou un appel peut etre genere via un reseau telephonique public commute.
Legal Status (Type, Date, Text)
Publication 20010823 A1 With international search report.
Publication 20010823 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Fulltext Availability:
Claims

Claim
... call should be routed
wherein the destination switch or gateway contains the necessary intelligence to complete the call routing.
Thus, as may be seen, a **hierarchical** or tiered approach is implemented in conventional telephone systems for routing calls on an international basis or regional basis.
As the World Wide Web becomes a resource for telecommunications, it offers the possibility of expanding telecommunications options and for reducing the costs for long **distance** calls. An additional advantage is that the tiered topologies of the traditional telephone networks are avoided. One problem, however, is that current Internet based telephone...node may support another country, or set of countries or all countries.
One may also define a set of special treatment numbers (feature codes) per **node** for which a **separate** action needs to be taken.
BRIEF DESCRIPTION OF THE DRAWINGS
FIG. 1 is a functional block diagram of a traditional public switch telephone network (PSTN...

11/5,K/8 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00816677 **Image available**
SYSTEM AND METHOD FOR PROVIDING AN EYE SAFE LASER COMMUNICATION SYSTEM
SYSTEME ET PROCEDE PERMETTANT DE CREER UN SYSTEME DE COMMUNICATION PAR LASER INOFFENSIF POUR L'OEIL
Patent Applicant/Assignee:
AIRFIBER INC, 16510 Via Esprillo, San Diego, CA 92127, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
ACAMPORA Anthony, 16510 Via Esprillo, San Diego, CA 92127, US, US (Residence), US (Nationality), (Designated only for: US)
BLOOM Scott, 16510 Via Esprillo, San Diego, CA 92127, US, US (Residence), US (Nationality), (Designated only for: US)
DUNN James E, 16510 Via Esprillo, San Diego, CA 92127, US, US (Residence)

, US (Nationality), [redacted]signated only for: US) [redacted]
Legal Representative:
HARRIS Scott C (agent), Fish & Richardson P.C., Suite 500, 4350 La Jolla Village Drive, San Diego, CA 92122, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200150179 A1 20010712 (WO 0150179)
Application: WO 2000US34778 20001220 (PCT/WO US0034778)
Priority Application: US 99473076 19991228
Parent Application/Grant:
Related by Continuation to: US 99473076 19991228 (CON)
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G02B-027/00
International Patent Class: H04B-010/00; H04B-010/02; H04B-010/08
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 8167

English Abstract
A system and method for producing an eye safe laser communication system, wherein the system detects an interfering object (714) in the optical path and cuts off or reduces the power of the communication beam (374) to safe levels, and in one embodiment, a second laser diode transmitter (514) and receiver (512) is installed in each network node, wherein the laser transmitter (514) is pointed at a corresponding network node (714) and the pulses travel in parallel with the communication beam (374), and further the pulses are reflected back (830) to the transmitting node where they are detected, and their flight time is measured, and when an interfering object is present, the pulses bounce of the interfering object and return to the receiver in the transmitting node, resulting in a reduced flight time, wherein the reduced flight time is interpreted as an interfering object and the beam is shut down or reduced (832) to a safe level.

French Abstract
La presente invention concerne un systeme et un procede permettant de creer un systeme de communication par laser inoffensif pour l'oeil. Selon le procede de l'invention, lorsque le systeme detecte un objet (714) traversant la trajectoire optique, il coupe ou reduit la puissance du faisceau de communication (374) a un niveau inoffensif pour l'oeil. Dans un mode de realisation, un second emetteur-recepteur a diode (514, 512) est installe dans chaque noeud du reseau. L'emetteur a laser (514) est pointe sur un noeud (714) correspondant du reseau et les impulsions voyagent en parallele avec le faisceau de communication (374). Les impulsions sont reflechies (830) vers le noeud de transmission ou elles sont detectees. On mesure leur temps de vol. Lorsqu'un objet perturbateur est present, les impulsions rebondissent sur l'objet perturbateur et retournent au recepteur du noeud d'emission, ce qui raccourcit leur temps de vol. Ce temps de vol raccourci est interprete comme indiquant la presence d'un objet perturbateur et le faisceau est coupe ou reduit (832) a un niveau inoffensif.

Legal Status (Type, Date, Text)
Publication 20010712 A1 With international search report.
Publication 20010712 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination 20011115 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:
Claims

Claim
... PMTs), photodiode detectors (PDDs) or other photodetectors as the receivers. And although the network I 00 illustrated in Figure I is illustrated as a branching **tree** 1 5 network structure, other network structures can be implemented.
The network I 00 can be implemented and utilized to directly connect a plurality of...capabilities. In the example illustrated in Figure 3, where each node head has a single transceiver, node 108 can communicate with up to four other **nodes** 108 at
four **separate** locations. Other numbers of **node** head 354 can be included,
depending on the fan-out capability desired for the node 108.
Preferably each node head 354 includes a pointing mechanism...of components of node head 354. In addition, the housing serves as a laser eye safety device. That is, in the configuration described above, the **distance** between the laser and the housing surface is far enough to decrease the density of the laser to safe levels as to not cause eye...

11/5,K/13 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00576339 **Image available**
IMPROVED TECHNIQUES FOR SPATIAL REPRESENTATION OF DATA AND BROWSING BASED ON SIMILARITY
TECHNIQUES AMELIOREES FONDEES SUR LA SIMILARITE PERMETTANT LA REPRESENTATION SPATIALE DES DONNEES ET LA NAVIGATION
Patent Applicant/Assignee:
SONY ELECTRONICS INC,
Inventor(s):
RISING Hawley K III,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200039712 A1 20000706 (WO 0039712)
Application: WO 99US30298 19991220 (PCT/WO US9930298)
Priority Application: US 98220614 19981224
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: G06F-017/30
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 10402

English Abstract
The present invention provides improves techniques for spatial representation of data and browsing based on similarity. For example, improved techniques for spatial representation of image (270) data and browsing the image data based on the similarities (or dissimilarities) of the images are provided. In one embodiment, a hierarchical MultiDimensional Scaling (MDS) database (230) for a set of images is provided, which allows for computationally efficient querying and updating of an image database. In one embodiment, techniques for modifying an MDS database for images are provided to allow for more intuitive browsing (or searching) of the images.

French Abstract
L'invention concerne des techniques ameliorees permettant la representation spatiale des donnees et la navigation sur la base de

similarite. Elle offre par exemple des techniques ameliorees destinees a la representation spatiale des donnees d'image (270) et a la navigation dans les donnees d'image sur la base des similarites ou des dissimilarites. Dans un mode de realisation, on utilise une base de donnees (230) de mise a l'echelle pluridimensionnelle (MultiDimensional Scaling, ou MDS) pour un ensemble d'images, cette base de donnees permettant une interrogation et une mise a jour de la base de donnees d'image qui sont efficaces du point de vue du calcul. Dans un mode de realisation, on utilise des techniques pour modifier une base de donnees MDS pour les images afin de pouvoir effectuer une navigation ou une recherche plus intuitive parmi les images.

Fulltext Availability:
Claims

Claim
... poi re ere an
for the pare No
Yes 310
Execute IVIDS on
the selected points
to determine a root
configuration and
bounding box
314
Split the first **node**
into multiple **nodes**
under the root
Figure 3
/6
eg n
402
measure
dissimilarity of a
collection of
images by
distances using
404
Obtain list of
images in root
node and send to
feature detectors
to obtain list of
distances
Perform a single
node update at the!
current node toI
determine position @.411
of query/add 406
image in the
current node
Determine and 408...

...traversed
path and perform a
single node update
at the leaf node 424
Yes- 420 No Execute IVIDS on
416 the leaf to which
Sort **distances** to No the new image is
points in nodes a no e being added using
traversed f II? previously
calculated
422 coordinates for
Yes new...

...604
Determine field

values for all
nearest neighbor
points of the target
point
/ 606
Calculate the field
value of the
source point
608
Modify the
distance between
the source point
and the target
point using the
source and target
field values
610
Modify

11/5,K/18 (Item 15 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00305932 **Image available**
NETWORK ARRANGEMENT
CONFIGURATION DE RESEAU
Patent Applicant/Assignee:
NOKIA TELECOMMUNICATIONS OY,
KAINULAINEN Jukka,
PELTOMAKI Arto,
Inventor(s):
KAINULAINEN Jukka,
PELTOMAKI Arto,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9524083 A2 19950908
Application: WO 95FI97 19950223 (PCT/WO FI9500097)
Priority Application: FI 94927 19940225
Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU
JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD
SE SG SI SK TJ TT UA UG US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: H04L-012/46
International Patent Class: H04J-03:06
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 7544

English Abstract
The present invention relates to a method for connecting a system (MS; MS1; MS2) utilizing message-based synchronization with an external system (ES). The message-based system comprises a plurality of nodes (1... 6, IN1, IN2) interchanging signals containing synchronization messages with information about the priority of the respective signal in the internal synchronization hierarchy of the system. To produce as flexible a connection as possible, the external system (ES) is connected to the system utilizing message-based synchronization by converting the synchronization status received from the external system into the internal synchronization status of the system (MS) using message-based synchronization in the interface node (IN1, IN2) of the system (MS) using message-based synchronization in such a manner that the level in the internal synchronization hierarchy of the message-based system as indicated by said internal synchronization status rises or falls corresponding to the rise and, correspondingly, fall of a predetermined magnitude occurring in the synchronization status of the external system. In a second embodiment, the internal synchronization status obtains a

certain constant level in the internal synchronization hierarchy of the system and said constant level is used together with the synchronization status data received from the external system (ES) in selecting the source of synchronization in the message-based system.

French Abstract

Procede de raccordement d'un systeme (MS; MS1; MS2) utilisant une synchronisation par messages avec un systeme externe (ES). Le systeme a messages comporte un certain nombre de noeuds (1... 6, IN1, IN2) echangeant des signaux renfermant des messages de synchronisation pour des informations concernant la priorite du signal respectif dans la hierarchie interne de synchronisation du systeme. Afin d'obtenir un raccordemenmt aussi souple que possible, le systeme externe (ES) est raccorde au systeme a l'aide d'une synchronisation par messages utilisant la conversion de l'etat de synchronisation recu en provenance du systeme externe, en etat interne de synchronisation du systeme (MS), au moyen de la synchronisation par messages dans le noeud d'interface (IN1, IN2) du systeme (MS) utilisant la synchronisation par messages, de telle sorte que le rang occupe par le systeme a messages dans la hierarchie interne de synchronisation, tel qu'il est indique par ledit etat interne de synchronisation, avance ou recule en fonction de l'avance ou du recul d'une valeur predeterminee presente dans l'etat de synchronisation du systeme externe. Dans un second mode de realisation, l'etat interne de synchronisation obtient un certain rang constant dans la hierarchie interne de synchronisation du systeme, et ce rang constant est utilise, conjointement avec les donnees d'etat de synchronisation recues en provenance du systeme externe (ES), dans la selection de la source de synchronisation dans le systeme a messages.

Fulltext Availability:
Claims

Claim
... node selects the
frequency of a signal from a neighbouring node, the
frequency of its own internal clock source or a
frequency applied to the **node** via a **separate**
synchronization input from an external clock source as
the source of its own clock frequency. In order that all
nodes in the system would operate...

...adjacent to the master source but not directly connected
to the master source are synchronized with these
adjacent nodes, Accordingly, each node at a greater
distance from the master source synchronizes itself with
a node one node spacing closer to the master source. In order that the
above-described synchron
ization **hierarchy** could be established within the
system, the system nodes interchange synchronization
messages, These messages contain information by means
of which individual nodes are able to system has achieved a stable state
as far as
synchronization is concerned, the system has been
synchronized **hierarchically** with the clock frequency of
the master source. Figure 1 shows a system MS utilizing message
based synchronization in a stable situation. Priorities
assigned to...

11/5,K/19 (Item 16 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00268264
A RAPID TREE-BASED METHOD FOR VECTOR QUANTIZATION
METHODE ARBORESCENTE RAPIDE DE QUANTIFICATION VECTORIELLE
Patent Applicant/Assignee:
APPLE COMPUTER INC,

Inventor(s):
ACERO Alejandro,
LEE Kai-Fu,
CHOW Yen-Lu,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9416436 A1 19940721
Application: WO 93US12637 19931229 (PCT/WO US9312637)
Priority Application: US 92999354 19921231
Designated States: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: G10L-007/08
International Patent Class: G10L-05:06; G10L-09:06; G10L-09:18
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 6838

English Abstract
A fast vector quantization (VQ) method and apparatus is based on a binary **tree** search in which the branching decision of each node is made by a simple comparison of a pre-selected element of the candidate vector with a stored threshold resulting in a binary decision for reaching the next lower level. Each node has a preassigned element and threshold value. Conventional centroid **distance** training techniques (such as LBG and k-means) are used to establish code-book indices corresponding to a set of VQ centroids. The set of training vectors are used a second time to select a vector element and threshold value at each **node** that approximately **splits** the data evenly. After processing the training vectors through the binary **tree** using threshold decisions, a histogram is generated for each code-book index that represents the number of times a training vector belonging to a given index set appeared at each index. The final quantization is accomplished by processing and then selecting the nearest centroid belonging to that histogram. Accuracy comparable to that achieved by conventional binary **tree** VQ is realized but with almost a full magnitude increase in processing speed.

French Abstract
L'invention se rapporte a un appareil et a une methode rapide de quantification vectorielle (QV) qui est basee sur une recherche arborescente binaire dans laquelle la decision de branchement de chaque noeud se fait par une simple comparaison d'un element preselectionne du vector candidat a l'aide d'un seuil enregistre entrainant une decision binaire en vue d'atteindre le niveau suivant inferieur. Chaque noeud comporte un element preatribue et une valeur de seuil. Des techniques de formation traditionnelles de distance du centre de gravite (telles que LGB et elements k) sont utilisees pour etablir des indices de tables de codes correspondant a un ensemble de centres de gravite de QV. L'ensemble des vecteurs de formation est utilise une seconde fois pour selectionner un element vectoriel et la valeur de seuil au niveau de chaque noeud, ce qui divise approximativement les donnees de maniere egale. Apres le traitement des vecteurs de formation par l'intermediaire de l'arbre binaire utilisant des decisions de seuil, un histogramme est genere pour chaque indice de tables de codes qui represente le nombre de fois ou le vecteur de formation, appartenant a un ensemble d'indices donne, est apparu au niveau de chaque indice. On effectue la quantification finale en traitant, puis en selectionnant le centre de gravite le plus proche appartenant a cet histogramme. Une precision comparable a celle obtenue par quantification vectorielle (QV) traditionnelle de l'arbre binaire est realisee, mais avec a peu pres une augmentation d'amplitude totale de la vitesse de traitement.

English Abstract
A fast vector quantization (VQ) method and apparatus is based on a binary **tree** search in which the branching decision of each node is made by a simple comparison of a pre-selected element of the candidate vector with

a stored threshold resulting in a binary decision for reaching the next lower level. Each node has a preassigned element and threshold value. Conventional centroid **distance** training techniques (such as LBG and k-means) are used to establish code-book indices corresponding to a set of VQ centroids. The set of training vectors are used a second time to select a vector element and threshold value at each **node** that approximately **splits** the data evenly. After processing the training vectors through the binary **tree** using threshold decisions, a histogram is generated for each code-book index that represents the number of times a training vector belonging to a given...

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File   8:Ei Compendex(R) 1970-2003/Aug W2
         (c) 2003 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2003/Jul
         (c) 2003 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2003/Jul 31
         (c) 2003, EBSCO Publishing
File  65:Inside Conferences 1993-2003/Aug W3
         (c) 2003 BLDSC all rts. reserv.
File   2:INSPEC 1969-2003/Aug W2
         (c) 2003 Institution of Electrical Engineers
File 233:Internet & Personal Comp. Abs. 1981-2003/Jul
         (c) 2003, EBSCO Pub.
File  94:JICST-EPlus 1985-2003/Aug W3
         (c)2003 Japan Science and Tech Corp(JST)
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2003/Aug 19
         (c) 2003 ProQuest Info&Learning
File   6:NTIS 1964-2003/Aug W3
         (c) 2003 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2003/Aug W2
         (c) 2003 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2003/Aug W2
         (c) 2003 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Jul
         (c) 2003 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 266:FEDRIP 2003/Jun
         Comp & dist by NTIS, Intl Copyright All Rights Res
File  95:TEME-Technology & Management 1989-2003/Aug W1
         (c) 2003 FIZ TECHNIK
File 438:Library Lit. & Info. Science 1984-2003/Jul
         (c) 2003 The HW Wilson Co
File  62:SPIN(R) 1975-2003/Jul W1
         (c) 2003 American Institute of Physics
File 239:Mathsci 1940-2003/Oct
         (c) 2003 American Mathematical Society

Set     Items   Description
S1     756358   TREE? ? OR HIERARCH?
S2      17992   DECISION()TREE? ?
S3      15826   (NODE? ? OR LEAVE? ? OR LEAF??)(5N)(SPLIT???? OR PARTITION-
             ??? OR DIVID??? OR DIVISION OR SEGMENT? OR FRAGMENT? OR PARS?-
             ?? OR BREAK??? OR BROKEN OR SEPARAT? OR CHOP????)
S4     874584   DISTANCE? ?
S5      82360   EUCLIDEAN? ?
S6         10   S2 AND S3 AND S4
S7          7   RD (unique items)
S8          3   S1 AND S3 AND S4 AND S5
```

File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)
(c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200353
(c) 2003 Thomson Derwent

Set	Items	Description
S1	59062	TREE? ? OR HIERARCH?
S2	343	DECISION()TREE? ?
S3	7128	(NODE? ? OR LEAVE? ? OR LEAF??)(5N)(SPLIT???? OR PARTITION-??? OR DIVID??? OR DIVISION OR SEGMENT? OR FRAGMENT? OR PARS?-?? OR BREAK??? OR BROKEN OR SEPARAT? OR CHOP????)
S4	507489	DISTANCE? ?
S5	295	EUCLIDEAN? ?
S6	0	S2 AND S3 AND S4
S7	1	PN=US 5799311
S8	8	S1 AND S3 AND S4
S9	1	S8 AND S5
S10	8	S8:S9

10/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO

06277785 **Image available**
DATA CLUSTERING METHOD AND DEVICE AND PROGRAM RECORDING MEDIUM

PUB. NO.: 11-219374 [JP 11219374 A]
PUBLISHED: August 10, 1999 (19990810)
INVENTOR(s): SINGH VINEET
RANKA SANJAY
ALSABTI KHALED
APPLICANT(s): HITACHI LTD
APPL. NO.: 10-310117 [JP 98310117]
FILED: October 30, 1998 (19981030)
PRIORITY: 962470 [US 962470], US (United States of America), October 31, 1997 (19971031)
INTL CLASS: G06F-017/30

ABSTRACT

PROBLEM TO BE SOLVED: To reduce the number of times of **distance** calculation for data clustering.

SOLUTION: A search **tree** for multi-dimensional search to plural pattern vectors to be **divided** into clusters is constructed and **nodes** other than a root node are made to correspond to the partial spaces of a data space (101). The nodes of the search **tree** are successively scanned and the respective nodes are subjected to the following processings. For the respective partial paces corresponding to the respective nodes, a temporary representative point not expected to be closest to the pattern vector inside the partial space among the plural temporary representative points for representing the plural clusters is discriminated (200). Thereafter, the closest temporary representative point to the respective pattern vectors inside the partial space is selected from among the plural temporary representative points after the temporary representative point not expected to be the closest is eliminated.

10/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO

05063012 **Image available**
PLANE OPTICAL MESH CONNECTION TYPE **TREE** INTERCONNECTION NETWORK

PUB. NO.: 08-018512 [JP 8018512 A]
PUBLISHED: January 19, 1996 (19960119)
INVENTOR(s): KAWAI SHIGERU
KASAHARA KENICHI
KUBOTA KEIICHI
YAO RI
RICHIYAADO EI RINKE
YUU DAA RIYUU
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-036953 [JP 9536953]
FILED: February 24, 1995 (19950224)
PRIORITY: 7-269,913 [US 269913-1994], US (United States of America), June 30, 1994 (19940630)
INTL CLASS: [6] H04B-010/20
JAPIO CLASS: 44.2 (COMMUNICATION -- Transmission Systems)
JAPIO KEYWORD: R002 (LASERS); R095 (ELECTRONIC MATERIALS -- Semiconductor Mixed Crystals)

ABSTRACT

PURPOSE: To eliminate a need for partition of the surface of a bottom side as a transmission and reflection member by sending light from a transmitter

means of a master node to a receiver means and reflecting the light on a reflecting face between selected nodes for the communication.

CONSTITUTION: An object node 40 is selected by a pixel electronic device relating to each transmitter node 42. A switched signal is sent from the transmitter 42 toward a plane reflector 20 upward in the vertical direction, and a signal is reflected on the plane reflector toward an object receiver decided in advance in the object node 40. Since the light is guided from the transmitter 42 to the object optical receiver by one hopping, a collimation/deflection plane optical member 46 requires an interface 44. Thus, a space between a **node division** plane 18 and a reflector 20 is shared by layers 52, 54 made of an optically transparent material. The transmission **distance** is a **distance** (length of layer 54) between a **node division** plane 8 and a transparent optical member array in the interface 44.

10/5/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO

04822770 **Image available**
HIGH SPEED VECTOR QUANTIZER AND HIGH SPEED VECTOR QUANTIZING METHOD

PUB. NO.: 07-115370 [JP 7115370 A]
PUBLISHED: May 02, 1995 (19950502)
INVENTOR(s): SATO TATSUYA
AKAHORI ICHIRO
FURUHATA KEIJI
SATO HIDEKI
APPLICANT(s): NIPPONDENSO CO LTD [000426] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 05-285921 [JP 93285921]
FILED: October 18, 1993 (19931018)
INTL CLASS: [6] H03M-007/30
JAPIO CLASS: 42.4 (ELECTRONICS -- Basic Circuits)

ABSTRACT
PURPOSE: To provide the vector quantizer and the vector quantizing method, by which a code vector of the minimum distortion is obtained, and the data processing capacity is improved.
CONSTITUTION: The figure shows a block diagram of the high speed vector quantizer, consists of a retrieval control means 1b having a **distance** calculating circuit 1g of an exclusive IC, and a code book(CB) 1a, and the CB 1a is a ROM having a **node dividing** condition of a bisected **tree** structure up to an m-th stage. By using a reduced multi-dimensional **tree**, the divided area is reduced more remarkably. To which vector of the CB 1a an input vector 1h is the nearest is compared with a square value of a **distance** by a .infinity. norm to an area formed by each node, after following a bisected **tree** and deriving a temporary solution, all the nodes are checked, and in the end, a result if outputted from a back track control part 1c. A calculation of the .infinity. norm **distance** is only subtraction and a square operation, a square root calculation containing a floating point is not required, and the calculation can be saved considerably, compared with deriving a **Euclidean distance** and executing the comparison.

10/5/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO

02275957 **Image available**
ROBOT SIMULATION SYSTEM

PUB. NO.: 62-192857 [JP 62192857 A]
PUBLISHED: August 24, 1987 (19870824)
INVENTOR(s): OI TADASHI

TAKEGAKI M[redacted]KAZU
APPLICANT(s): MITSUBISHI [redacted]ECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 61-035702 [JP 8635702]
FILED: February 20, 1986 (19860220)
INTL CLASS: [4] G06F-015/60; G05B-019/405
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 22.3 (MACHINERY -- Control & Regulation); 36.1 (LABOR SAVING DEVICES -- Industrial Robots)
JOURNAL: Section: P, Section No. 665, Vol. 12, No. 46, Pg. 89, February 12, 1988 (19880212)

ABSTRACT

PURPOSE: To analyze an interaction of the environment and a robot at a high speed and with a high accuracy by installing an 8-split **tree** data structure of a work environment, and returning an analysis of the interaction of the environment and the robot to a **node** retrieval on this 8- **split** **tree** data.

CONSTITUTION: At the time of the data related to the environment and a shape and a size of a robot is inputted by using a data input device (a), a solid image data is generated by an image data generating means (b). Subsequently, the image data of the environment, which has been generated by the image data generating means (b) is converted to the 8-split **tree** data and generated by an 8-split **tree** data generating means (e), and stored in an 8-split **tree** data storage device (f). In this state, if an operation of the robot is given from a simulation operating means (d), an interference inspection of the environment and the robot, and a calculation of a **distance** extending from the robot to the environment are executed at a high speed by an 8- **split** data **node** searching means (g), and its result is transferred to the simulation operating means (d), and displayed on an image display device (i).

10/5/5 (Item 1 from file: 350)

012813653 **Image available**
WPI Acc No: 1999-619884/199953
XRPX Acc No: N99-457173

Spatially similar high dimensional data object points associating method for database applications

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: AGRAWAL R; SHIM K; SRIKANT R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5978794	A	19991102	US 96629688	A	19960409	199953	B

Priority Applications (No Type Date): US 96629688 A 19960409
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5978794	A		14	G06F-017/00	

Abstract (Basic): US 5978794 A

NOVELTY - The points associated with the pair of leaf node selected by scanning of interior nodes of data structure, are sort-merged, based on the common sort dimension. The points of selected pair of leaf node are joined, when **distance** between any two points is at most epsilon.

DETAILED DESCRIPTION - A multi-dimensional data structure having several leaf nodes for organizing the points, in created. Each **leaf node** is **split** into (1/epsilon) child **nodes** , where epsilon is similar **distance** , based on the depth of the leaf node. When the number of points associated with the leaf node exceeds a predetermined value, the dimensions used for **splitting** the **nodes** in an order of correlation among the dimensions, such that the dimension next to the dimension used for splitting has the least correlation with previously

used dimensions. The points in each leaf node is sorted using one of the dimensions not used for **splitting** the **leaf nodes** , as common sort dimension. INDEPENDENT CLAIMS are also included for the following:

(a) high dimensional data object points associating system;
(b) a program product for associating high dimensional data object points

USE - For coupling spatially similar dimensional data objects in multi-media database, scientific database, medical database, time series database.

ADVANTAGE - Since the order of dimensions to be split is determined based on correlations between the dimensions, the system storage requirements during coupling operator is minimized greatly. The use of the common sort dimension eliminates the need for repeatedly sorting the points during coupling operation. Since the global ordering is used for selecting the **split** dimensions, the number of neighbor **nodes** to be examined are minimized. Since algorithms are offered for generating the E-K-D- B **tree** using biased **splitting** , the number of **nodes** to be examined during coupling operation are reduced.

DESCRIPTION OF DRAWING(S) - The figure shows flowchart illustrating the overall operations involved in spatially similar high dimensional data objects coupling method.

pp; 14 DwgNo 1/8

Title Terms: SPACE; SIMILAR; HIGH; DIMENSION; DATA; OBJECT; POINT; ASSOCIATE; METHOD; DATABASE; APPLY
Derwent Class: T01
International Patent Class (Main): G06F-017/00
File Segment: EPI

10/5/6 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012686307
WPI Acc No: 1999-492414/199941
XRPX Acc No: N99-366686
Extracting domain-dependent compound works - By morphological analysis of target texts using general dictionary and generating parse tree
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
RD 424086	A	19990810	RD 99424086	A	19990720	199941	B

Priority Applications (No Type Date): RD 99424086 A 19990720
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RD 424086	A		2	G06F-000/00	

Abstract (Basic): RD 424086 A

NOVELTY - Method consists in applying morphological analysis to the target texts using a general dictionary, analyzing modifier-modifiee relationships and using grammatical information to generate a **parse tree** in which the **nodes** are words and the arcs are modifier-modifiee relationships. Then pairs of words within a specific **distance** are collected and their **distances** from each other are recorded, with the shortest path recorded if two words are linked by more than one relationship due to ambiguities. A pair is then registered as a candidate compound word if the values are larger than a set threshold.

USE - Method is for automatically extracting words describing unique concepts in a specific domain from a collection of texts, in e.g. analyzing a large amount of textual data.

Dwg.0/0

Title Terms: EXTRACT; DOMAIN; DEPEND; COMPOUND; WORK; MORPHOLOGY; ANALYSE; TARGET; TEXT; GENERAL; DICTIONARY; GENERATE; PARSE; **TREE**
Derwent Class: T01
International Patent Class (Main): G06F-000/00

File Segment: EPI

10/5/7 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012468259 **Image available**
WPI Acc No: 1999-274367/199923
XRPX Acc No: N99-205925
Path designating computer apparatus in exchange system - includes controller for maintaining tables comprising details of parent and link identification and effective distance **of identified node from controller**
Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: GUPTA A; HSIAO T; ROM R
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11088428	A	19990330	JP 98184065	A	19980630	199923	B
US 6584075	B1	20030624	US 97886130	A	19970630	200343	

Priority Applications (No Type Date): US 97886130 A 19970630
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11088428	A		53	H04L-012/56	
US 6584075	B1			H04L-012/28	

Abstract (Basic): JP 11088428 A
NOVELTY - A controller directs digital information from number of input ports to a suitable output port. The path designation information are stored as tables in controller. The table contains information **tree** regarding parent and link identification and the range of **separation** of **node** identified by **node** identification from controller.
USE - For designating path in exchange system.
ADVANTAGE - Adopts quickly changes in network configuration until new preferred routing **tree** is calculated. DESCRIPTION OF DRAWING(S) - The figure is a block diagram of path designating computer apparatus.
Dwg.1/8
Title Terms: PATH; DESIGNATED; COMPUTER; APPARATUS; EXCHANGE; SYSTEM; CONTROL; MAINTAIN; TABLE; COMPRISE; DETAIL; PARENT; LINK; IDENTIFY; EFFECT; **DISTANCE** ; IDENTIFY; NODE; CONTROL
Derwent Class: W01
International Patent Class (Main): H04L-012/28; H04L-012/56
File Segment: EPI

10/5/8 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010296440 **Image available**
WPI Acc No: 1995-197700/199526
XRPX Acc No: N95-155217
High speed vector quantisation device - divides input signal sequences into blocks and quantises in multidimensional space using back-track control unit to output minimum code vector index
Patent Assignee: NIPPONDENSO CO LTD (NPDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7115370	A	19950502	JP 93285921	A	19931018	199526	B

Priority Applications (No Type Date): JP 93285921 A 19931018
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7115370	A		12	H03M-007/30	

Abstract (Basic): JP 711[redacted]70 A

The quantiser co[redacted]sts of a reference control uni[redacted]1b) with one **distance** measurement circuit using an exclusive IC and a code book (CB). A ROM (CB1a) has a **node dividing** condition that bisects the code into m steps. The **node division** condition consists of a threshold value which divides one element axis and its dimension (k) (where k > = 1). The code book is also divided **hierarchically** based on the dimension (k) of the input vector.

The control unit sequentially searches for the code error from the input vector (1h) and the minimum 2nd norm among several code vectors contained in the code book. After searching, the initial value of the search parameter is set up to determine which terminus node of the input vector belongs. The code searcher sets up a provisional solution of the 2nd norm of the code vector belonging to the terminus node. The steps are retraced back to the bisecting part to compare the norm to other domains to select the infinity norm whose value is shorter than the 2nd norm.

ADVANTAGE - Reduces time needed for signal processing.

Dwg.1/11

Title Terms: HIGH; SPEED; VECTOR; QUANTUM; DEVICE; DIVIDE; INPUT; SIGNAL; SEQUENCE; BLOCK; QUANTUM; MULTIDIMENSIONAL; SPACE; BACK; TRACK; CONTROL; UNIT; OUTPUT; MINIMUM; CODE; VECTOR; INDEX

Index Terms/Additional Words: HIGH; SPEE

Derwent Class: U21

International Patent Class (Main): H03M-007/30

File Segment: EPI